Accepted Manuscript

Temperature dependent regioselective synthesis of aryl tetrazole amines using copper source

S.N. Murthy Boddapati, A. Emmanuel Kola, Surendra Babu Kesana, Hari Babu Bollikolla

PII: S0022-328X(18)30279-1

DOI: 10.1016/j.jorganchem.2018.04.027

Reference: JOM 20419

To appear in: Journal of Organometallic Chemistry

Received Date: 1 February 2018

Revised Date: 2 April 2018
Accepted Date: 20 April 2018

Please cite this article as: S.N. Murthy Boddapati, A. Emmanuel Kola, S.B. Kesana, H.B. Bollikolla, Temperature dependent regioselective synthesis of aryl tetrazole amines using copper source, *Journal of Organometallic Chemistry* (2018), doi: 10.1016/j.jorganchem.2018.04.027.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Temperature dependent regioselective synthesis of aryl tetrazole amines using copper source

S N Murthy Boddapati, a,b A Emmanuel Kola, b Surendra Babu Kesana, c Hari Babu Bollikolla *

ABSTRACT

One pot highly efficient and simple protocol for the construction of aryl tetrazole amines *via* desulphurization/substitution/electro cyclization/*C-N* cross coupling reactions from thiourea with the use of cheap, readily available and air stable copper source as catalyst has been described. The reaction proceeds through the *in situ* formation of amino tetrazole followed by successive *C-N* cross-coupling reaction with aryl iodide. Further the temperature dependent regioselectivity in *N*-arylation of tetrazole amines has been described.

KEYWORDS

- ➤ Aryl tetrazole amines
- Regioselective synthesis
- Copper catalyst
- Desulphurization
- ➤ *C-N* Cross-Coupling Reaction

^a Dept. of Chemistry, Acharya Nagarjuna University, Guntur, Andhar Pradesh, India-522510.

^b Dept. Of Chemstry, Sir C. R. Reddy UG and PG College, Eluru, Andhra Pradesh, India-534002.

^c Dept. Of Chemstry, SVRM College, Nagaram, Andhra Pradesh, India-522268.

^{*}Corresponding author information: Dr. B. Hari Babu, Email: dr.b.haribabu@gmail.com; ph: +91-8632346575

Download English Version:

https://daneshyari.com/en/article/7755958

Download Persian Version:

https://daneshyari.com/article/7755958

<u>Daneshyari.com</u>